

Product datasheet for **RC226159**

Tau (MAPT) (NM_001123066) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tau (MAPT) (NM_001123066) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tau
Synonyms:	DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU; tau-40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC226159 representing NM_001123066
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTGAGCCCCGCCAGGAGTTGGAAGTATGGAAGATCACGCTGGGACGTACGGTTGGGGACAGGA
AAGATCAGGGGGCTACACCATGCACCAAGACCAAGAGGGTGACACGGACGCTGGCTGAAAGAATCTCC
CCTGCAGACCCCCACTGAGGACGGATCTGAGGAACCGGGCTCTGAAACCTCTGATGCTAAGAGCACTCCA
ACAGCGGAAGATGTGACAGCACCTTAGTGGATGAGGGAGCTCCCGCAAGCAGGCTGCCGCGCAGCCCC
ACACGGAGATCCCAGAAGGAACACAGCTGAAGAAGCAGGCATTGGAGACACCCCGAGCTGGAAGACGA
AGCTGCTGGTACGTGACCAAGAGCCTGAAAGTGGTAAGGTGGTCCAGGAAGGCTTCTCCGAGAGCCA
GGCCCCCAGGTCTGAGCCACCAGCTCATGTCCGGCATGCCTGGGGCTCCCTCTGCTGAGGGCCCCA
GAGAGGCCACACCCAACCTTCGGGGACAGGACCTGAGGACACAGAGGGCGGCCACGCCCTGAGCT
GCTCAAGCACAGCTTCTAGGAGACCTGCACCAGGAGGGCGCCGCTGAAGGGGCAGGGGGCAAAGAG
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CCTCCAAGGCCTCCCCAGCCCAAGATGGGCGGCCTCCCCAGACAGCCGCCAGAGAAGCCACCAGCATCCC
AGGCTTCCAGCGGAGGGTGCCATCCCCCTCCCTGTGGATTTCTCTCCAAAGTTTCCACAGAGATCCCA
GCCTCAGAGCCCCGACGGGCCAGTGTAGGGCGGGCCAAAGGGCAGGATGCCCCCTGGAGTTCACGTTTC
ACGTGGAATCACACCCAACGTGCAAGAAGGAGCAGGCGCACTCGGAGGAGCATTGGGAAGGGCTGCATT
TCCAGGGGCCCTTGAGAGGGGCCAGAGGCCGGGGCCCTCTTTGGGAGAGGACACAAAAGAGGCTGAC
CTTCCAGAGCCCTCTGAAAAGCAGCCTGCTGCTGCTCCGCGGGGAAGCCCGTCAGCCGGTCCCTCAAC
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CCTCCAAGTGTGGCTCATTAGGCAACATCCATCATAAACCAGGAGGTGGCCAGGTGGAAGTAAAATCTGA
GAAGCTTGACTTCAAGGACAGAGTCCAGTCAAGATTGGGTCCCTGGACAATATCACCCAGTCCCTGGC
GGAGGAAATAAAAAGATTGAAACCCACAAGCTGACCTTCCGCGAGAACGCCAAAGCCAAGACAGACCAG
GGGCGGAGATCGTGTACAAGTCGCCAGTGGTGTCTGGGACACGTCTCCACGGCATCTCAGCAATGTCTC
CTCCACCGGCAGCATCGACATGGTAGACTCGCCCCAGCTCGCCACGCTAGCTGACGAGGTGTCTGCCTCC
CTGGCCAAGCAGGTTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226159 representing NM_001123066
Red=Cloning site Green=Tags(s)

MAEPRQEFVEMEDHAGTYGLGDRKDQGGYTMHQDQEGD TDAGLKESPLQTPTEDGSEEPGSETSDAKSTP
TAEDVTAPLVDEGAPGKQAAAQPHTEIPEGTTAEEAGIGDTPSLEDEAAGHV TQEPESGKVVQEGFLREP
GPPGLSHQLMSGMPGAPLLPEGPREATRQPSGTGPEDEGGRHAPELLKHQL LGDLHQEGPPLKGAGGKE
RPGSKEEVDEDRDVESSPQDSPPSKASPAQDGRPPQTAAREATSIPGFPAEGAIPLPVD FL SKVSTEIP
ASEPDGSPVGRAGQDAPLEFTFHVEITPNVQKEQAHSEEH LGRAAFPGAPGEGPEARGPSLGEDTKEAD
LPEPSEKQPAAPRGKPVSRVPLKARMVSKSKDGTGSDDKKAKTSTRSSAKTLKNRPCLSPKHPTPGSS
DPLIQPSSPAVCPPEPSSPKHVSSVTSRTGSSGAKEMKLGADGKTKIATPRGAAPPQKGQANATRI PA
KTPPAPKTPPSSATKQVQRPPAGPRSERGEPKSGDRSGYSSPGSPGTPGSRSRTPSLPTPTREP KK
VAVVRTPPKSPSSAKSRLQTAPVMPDLKNVSKIGSTENLKHQPGGGKVQIINKKLDL SNVQSKCGSKD
NIKHVPGGGSVQIVYKVDLSKVTSKCGSLGNIHHKPGGGQVEVKSEKLD FDKDRVQSKIGSLDNITHVPG
GGNKKIETHKLTFRENAKAKTDHGAEIVYKSPVVS GDTSPRHL SNVSSTGSIDMVDSPLATLADEV SAS
LAKQGL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3120_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001123066

ORF Size: 2328 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001123066.2](#), [NP_001116538.1](#)

RefSeq ORF: 2331 bp

Locus ID: 4137

UniProt ID: [P10636](#)

Cytogenetics: 17q21.31

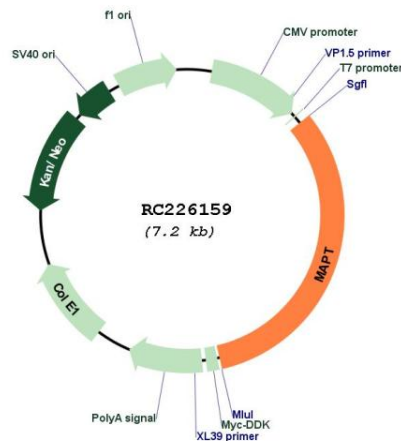
Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, MAPK signaling pathway

MW: 80.7 kDa

Gene Summary: This gene encodes the microtubule-associated protein tau (MAPT) whose transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type. MAPT gene mutations have been associated with several neurodegenerative disorders such as Alzheimer's disease, Pick's disease, frontotemporal dementia, cortico-basal degeneration and progressive supranuclear palsy. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC226159